UN



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignita 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/199,669	11/25/1998	ADNAN SHENNIB	ISM/005	3957	
75	90 07/23/2003				
DONALD R C	GREENE	EXAMINER			
P O BOX 12995 SCOTTSDALE, AZ 852672995			HARVEY, DIONNE		
			ART UNIT	PAPER NUMBER	
		2643			
		DATE MAILED: 07/23/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. 09/199,669

Applicant(s)

Shennib

Examiner

Dionne Harvey

Art Unit **2643** 

	The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
	or Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the							
- If the p - If NO p - Failure - Any rep	eriod for reph eriod for reph to rephy withi ply received b	communication.  ly specified above is less than thirty (30) days, a reply within the ly is specified above, the maximum statutory period will apply as in the set or extended period for reply will, by statute, cause the ly the Office later than three months after the mailing date of the adjustment. See 37 CFR 1.704(b).	nd will expire SIX (6) Note that the complex application to become	MONTHS fro e ABANDOI	om the mailing date of this communication. NED (35 U.S.C. § 133).		
Status							
1) 🗆	Respons	sive to communication(s) filed on			· · · · · · · · · · · · · · · · · · ·		
2a) 🗌	This acti	ion is <b>FINAL</b> . 2b) 💢 This acti	ion is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.							
Disposit	ion of Cla	aims					
4) 🗶	Claim(s)	1-140			is/are pending in the application.		
4	a) Of the	e above, claim(s) <u>138-140</u>			is/are withdrawn from consideration.		
5) 💢	Claim(s)	1-97			is/are allowed.		
6) 💢	Claim(s)	98-137			is/are rejected.		
_		·					
Applica	tion Pape	ers					
9) 🗆	The spec	cification is objected to by the Examiner.			• • •		
10)	The drav	wing(s) filed on is/are	a) accepted	or b)□	objected to by the Examiner.		
	Applica	nt may not request that any objection to the di	rawing(s) be held	d in abey	ance. See 37 CFR 1.85(a).		
11)	The prop	posed drawing correction filed on	is:	a) 🗆 ap	oproved b) $\square$ disapproved by the Examiner.		
	If appro	ved, corrected drawings are required in reply t	o this Office acti	ion.			
12)	The oath	n or declaration is objected to by the Exami	ner.				
		5 U.S.C. §§ 119 and 120					
13)□	Acknow	rledgement is made of a claim for foreign pr	iority under 35	U.S.C.	§ 119(a)-(d) or (f).		
a) 🗆	All b)	☐ Some* c)☐ None of:					
•	1. Certified copies of the priority documents have been received.						
:	2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).							
*See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).							
a) The translation of the foreign language provisional application has been received.  15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
_		ances Cited (PTO-892)	4) Interview Sum	mary (PTO-	413) Paper No(s)		
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		5) Notice of Informal Patent Application (PTO-152)					
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6) Other:							

Art Unit: 2643

#### **DETAILED ACTION**

#### Election/Restriction

Examiner agrees with the Applicant's arguments drawn to the Election/Restriction requirement in paper no. 5. Previously restricted Group I And Group II are not distinct. The following action has been treated as an election drawn to two groups wherein Group I consists of claims 1-137 and Group II consists of claims 138-140. Based upon the Applicant's non-election of Group II, the Examiner acknowledges the Applicant's election of Group I, claims 1-137, without traverse.

#### **Drawings**

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "65" has been used to designate both "cap body" and "guard body". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 109 recites "...debris guard comprises an adhesive pad...".

Art Unit: 2643

### Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 98,100-102,104-106,112-115,118,119,123 and 124 are rejected under 35 U.S.C. 102(e) as being anticipated by Fletcher (US 6,212,283).

Regarding claim 98, in figure 3, Fletcher teaches a hearing device adapted to be inserted entirely within the wearer's ear canal past the aperture for long term use therein, comprising a core assembly comprising transducer means (54) for converting sound waves into audible acoustic signals for imparting on the tympanic membrane and a battery (42) for powering the core assembly; a sealing retainer (53) seated within and occluding the bony region of the ear canal when the device is inserted within the ear canal, the sealing retainer including means for snugly supporting the core assembly along the longitudinal axis of the ear canal (sealing member-53 includes an aperture for insertion of element 51 of the core assembly), whereby the sealing

Application/Control Number: 09/199,669 Page 4

Art Unit: 2643

retainer (53) acoustically seals the bony region of the ear canal to prevent feedback, said core assembly including an extended portion (in figure 7, see elements 61 and 55) extending laterally and non-occludingly into the cartilaginous region with minimal or no contact of the ear canal wall.

Regarding claim 100, Fletcher teaches that the sealing retainer is sufficiently soft and yielding so as to conform to the shape of the ear canal for long term retention.

Regarding claim 101, Fletcher teaches that the sealing retainer comprises an air cavity to accept element 51 of the core assembly.

Regarding claim 102, Fletcher teaches moisture proof encapsulation (41,48, 51) of said device.

Regarding claim 104, Fletcher teaches that the transducer means includes a microphone (43) and receiver (54) each having a port, a further including at least one debris guard (87) for at least the microphone port or receiver port.

Regarding claim 105, Fletcher teaches that the debris guard is moisture proof.

Regarding claim 106, Fletcher teaches that the debris guard is acoustically transparent.

Regarding claim 112, Fletcher teaches signal processing circuitry (44) which includes an amplifier, as is well understood in the art.

Regarding claims 113 and 114, in figures 16 and 17, Fletcher teaches manually adjustable control means and programming means.

Regarding claim 115, in column 8, lines 51-70, Fletcher teaches an external programmer and adjustment means.

Art Unit: 2643

Regarding claims 118 and 119, Fletcher teaches that the sealing retainer is made of polyurethane foam, silicone or like material, as broadly claimed.

Regarding claim 123, in figure 3, Fletcher teaches that the forward portion of the receiver (54) protrudes medially beyond the sealing retainer(53).

Page 5

Regarding claim 124, Fletcher teaches a removal handle (81).

2. Claims 125-132, 134, 136 and 137 are rejected under 35 U.S.C. 102(e) as being anticipated by Aceti (US 6,058,198).

Regarding claim 125, Aceti teaches a sealing retainer (70) for use with a semi-permanent hearing device adapted to be inserted entirely within the ear canal past the aperture thereof, wherein said sealing retainer (70) is configures for positioning over the entire hearing device and is therefore positioned over the medial part thereof, such that the core assembly makes *minimal* contact with the walls of the cartilaginous region of the ear canal and is suspended within and snugly supported at the medial part by the extending projections (72) of the sealing retainer, and for seating with and occluding (said projection are radial and therefore occlude) the bony region of the ear canal of the wearer, whereby the sealing retainer provides acoustic sealing of said bony region to prevent feedback and the lateral extension of the core assembly avoids interference with hair and cerumen production due to it minimal contact with the wall of the auditory canal.

Regarding claim 126, Aceti teaches that the sealing retainer is sufficiently soft and yielding so as to conform to the shape of the ear canal for long term retention.

Application/Control Number: 09/199,669 Page 6

Art Unit: 2643

Regarding claims 127 and 128, Aceti teaches that the sealing retainer (70,72) is composed of compressible material, so as to assume a snug fit within the ear canal.

Regarding claims 129 and 130, Aceti teaches that the sealing retainer is made of polyurethane foam, silicone or like material, as broadly claimed.

Regarding claim 131, Aceti teaches that the sealing retainer, as well as the rest of the hearing aid device, is disposable.

Regarding claim 132, Aceti teaches that the sealing retainer includes and air cavity, into which housing (54) is positioned.

Regarding claim 134, Since the sealing retainer (70) is disposed about the entire core assembly, Aceti teaches that the core assembly protrudes from the medially disposed portion of the sealing retainer (70).

Regarding claim 136, figure 5, Aceti teaches that the cross section is oval in shape.

Regarding claim 137, in figure 2, Aceti teaches that the sealing retainer is *relatively* pointed at its inferior portion, as broadly claimed.

## Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2643

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 99, 107, 108, 110, 111, 116, 117, 120 and 121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher (US 6,212,283) in view of Garcia (US 5,743,692).

Regarding claim 99, Fletcher does not clearly teach that the sealing retainer is selectively separable from the core assembly. In column 6, lines 26-29, Garcia teaches a sealing retainer (30) which may be selectively separable from a core assembly. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Fletcher and Garcia, thereby providing a selectively separable sealing retainer so as to comfortably fit in the ears of wearers having different ear canal sizes.

Regarding claim 107 and 110, Garcia teaches a debris guard(32) which comprises a replaceable cap, as broadly claimed, and may be replaced via bayonet coupling (col.7, lines 5-7).

Regarding claim 108, in figure 3, as best understood with regard to the drawing objection, above, Garcia teaches that the debris guard comprises a body member and guard member.

Regarding claim 111, Garcia teaches that the core assembly may be constructed to comprise an air vent (17).

Regarding claims 116 and 117, Garcia teaches that the sealing retainer is compressible, providing a delayed expansion to assume a snug fit.

Regarding claim 120, Garcia teaches that the sealing retainer (30) is removable and disposable.

Art Unit: 2643

Regarding claim 121, In column 6, lines 26-29, Garcia teaches that the sealing retainer (30) is selectable in different sizes and shapes.

Page 8

4. Claims 103 and 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher (US 6,212,283).

Regarding claim 103, Fletcher does not clearly teach that the encapsulation has a wall thickness not to exceed .3 mm. However, it would have been obvious for one of ordinary skill in the art at the time of the invention to provide an moisture protection not exceeding a maximum thickness, so as not to prevent the device from being comfortably accommodated within the limited confines of the wearer's auditory canal.

Regarding claim 122, Fletcher does not clearly teach that the core assembly is disposable. However, it would have been obvious for one of ordinary skill in the art at the time of the invention to provide a disposable core assembly since this would allow for easier assembly, as well as overcoming the necessity of replacing batteries upon depletion.

5. Claims 133 and 135 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aceti (US 6,058,198).

Regarding claim 133, Aceti does not specifically teach that the sealing retainer (70) is assortedly sized and shaped to accommodate different ear canals. However, in column 3, lines

Page 9

Art Unit: 2643

60-69, Aceti teaches that there is a recognized need in the art to provide a sealing means for accommodating user's having ear canals of different sizes and dimensions, as claimed.

Regarding claim 135, Aceti does not clearly teach that the sealing retainer is worn without the core assembly for testing the wearers tolerance for long term wear. However, the Examiner takes the Official Notice, that pre-positioning/fitting of an device to be worn in the ear canal by an audiologist is well know in the art and would have been obvious to make sure that the device make be comfortable accommodated within the ear canal of the user.

## Allowable Subject Matter

Claims 1-97 are allowed.

#### Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111. The examiner can normally be reaches on Monday through Friday from 8:30am to 6:00pm.

Page 10

Art Unit: 2643

Any responses to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

or faxed to:

(703) 308-6306, for formal communications for entry

Or:

(703) 308-6296, for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor(Receptionist)

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (703) 305-4708.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111.

D.H.

July 15, 2003

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600